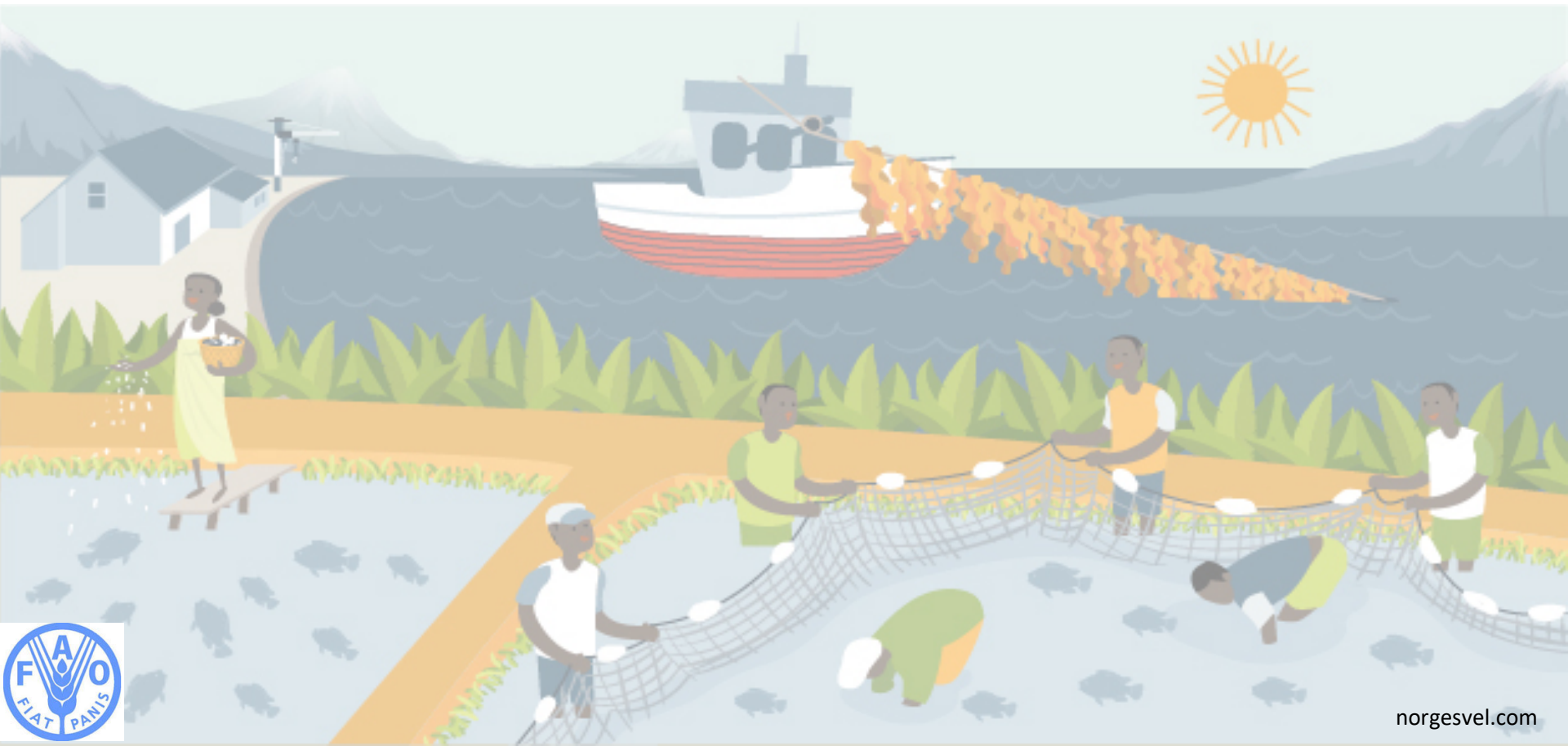


# *Essential* EAAM

Developing capacity in the ecosystems approach to aquaculture management (EAFM)



# Fish has a great potential in the world







**It is the most sustainable source of animal proteins**  
**- farmed fish use the least amount of feed than terrestrial animals**

# **Fish is the healthiest source of animal proteins**

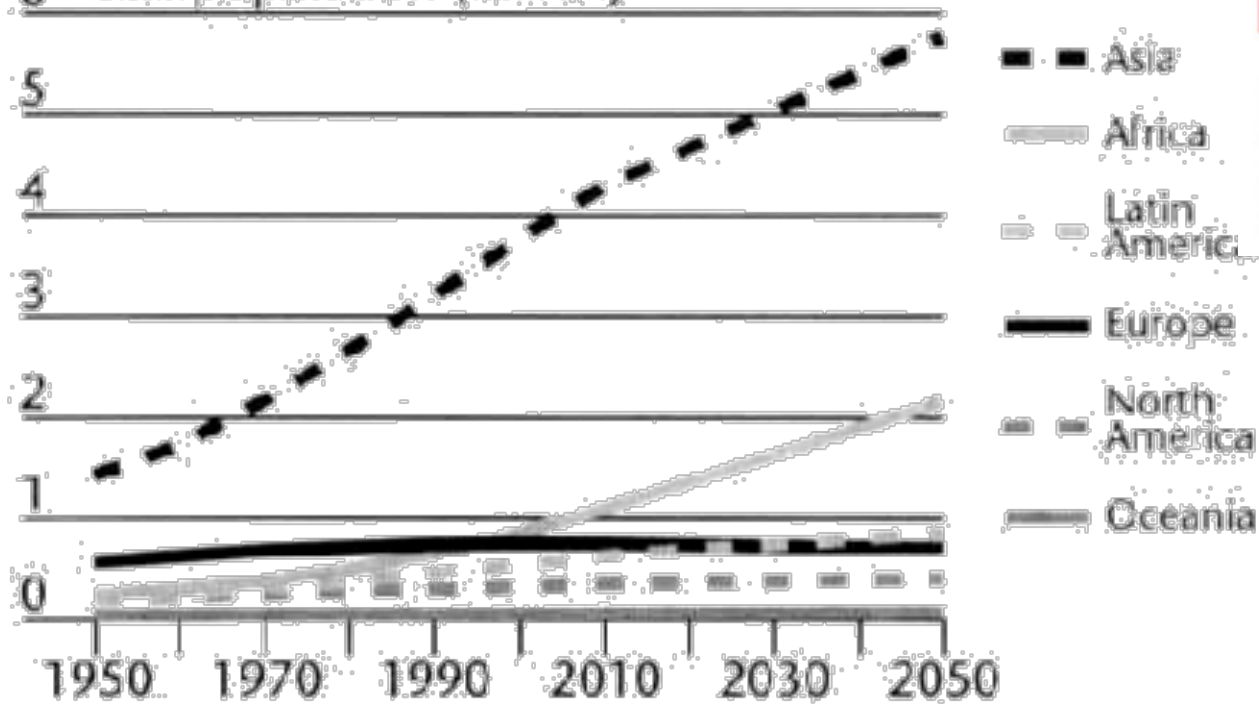
**It contains omega 3 fatty acids that prevent heart diseases, improve immune system and help children to develop brain**





# Population is growing but land is scarce to produce food

6 Total population (billion)



**HOW**  
TO FEED THE WORLD  
**2050**







About 71% of  
**Earth's** is  
**water-covered**







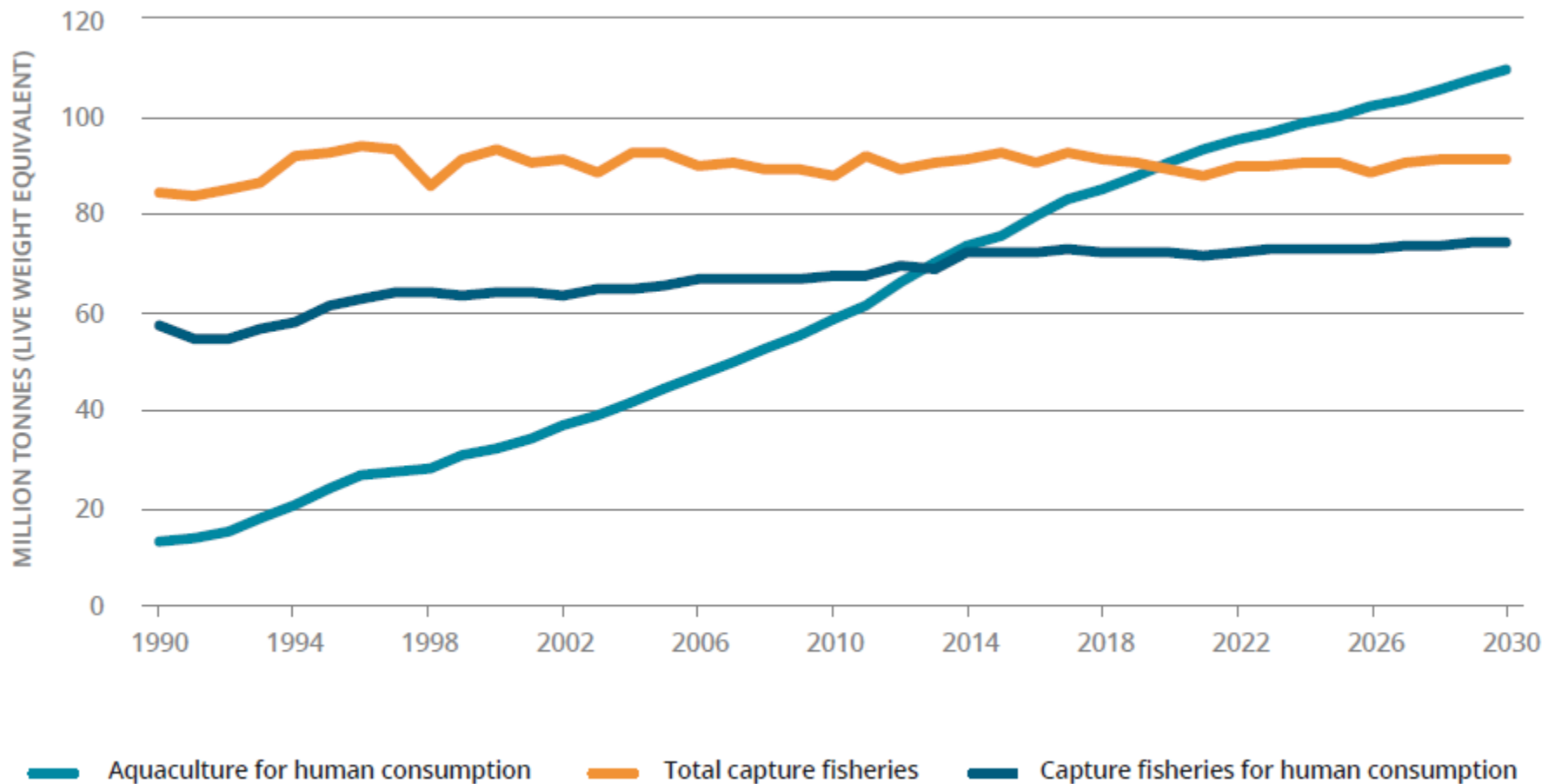
**Fishery**



**Aquaculture**

**Fish can be the solution**

# Global capture fisheries and aquaculture production, 1990–2030



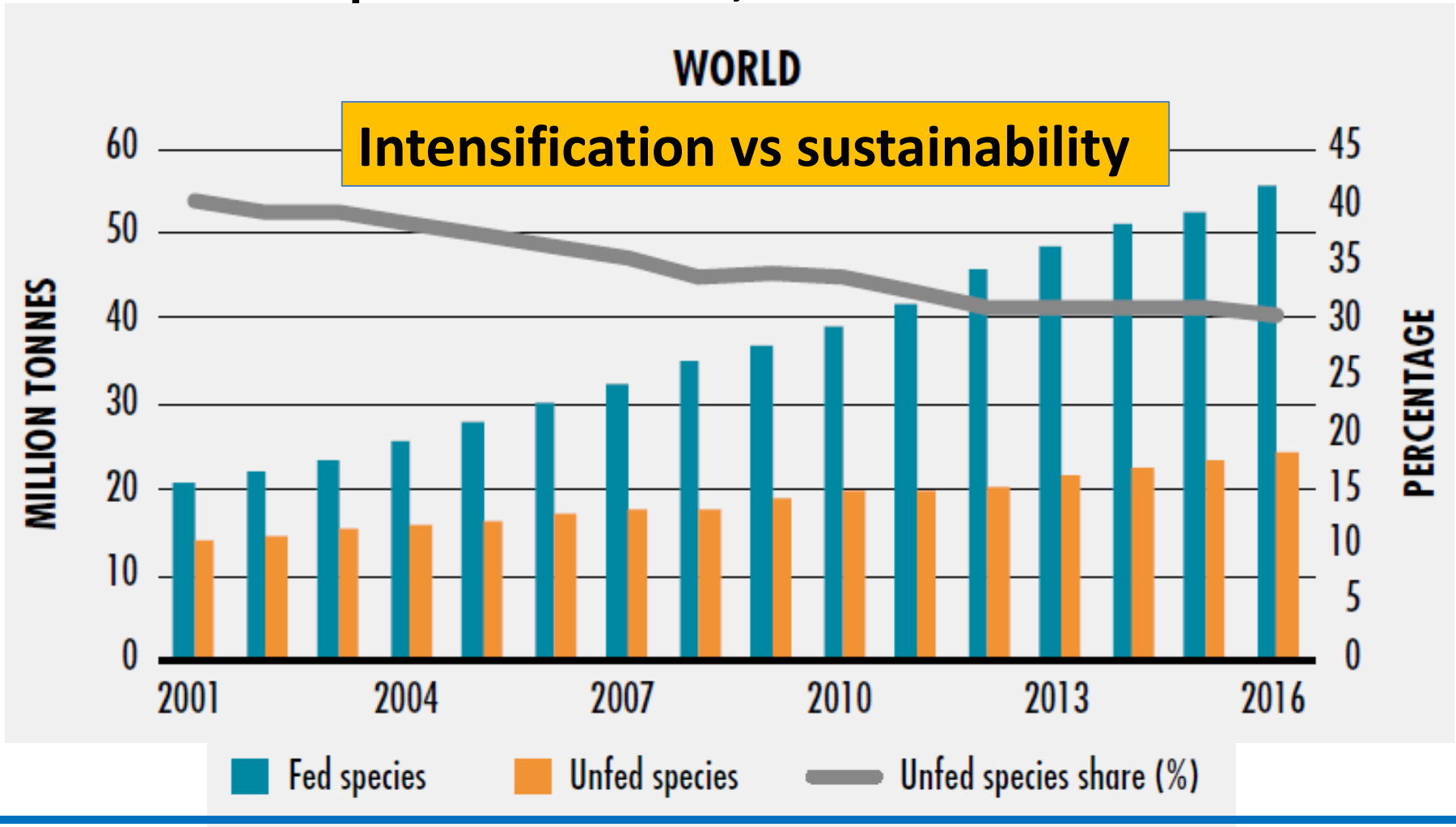


# Aquaculture of main groups of food fish species by continent, 2016 (in 1000 MT)

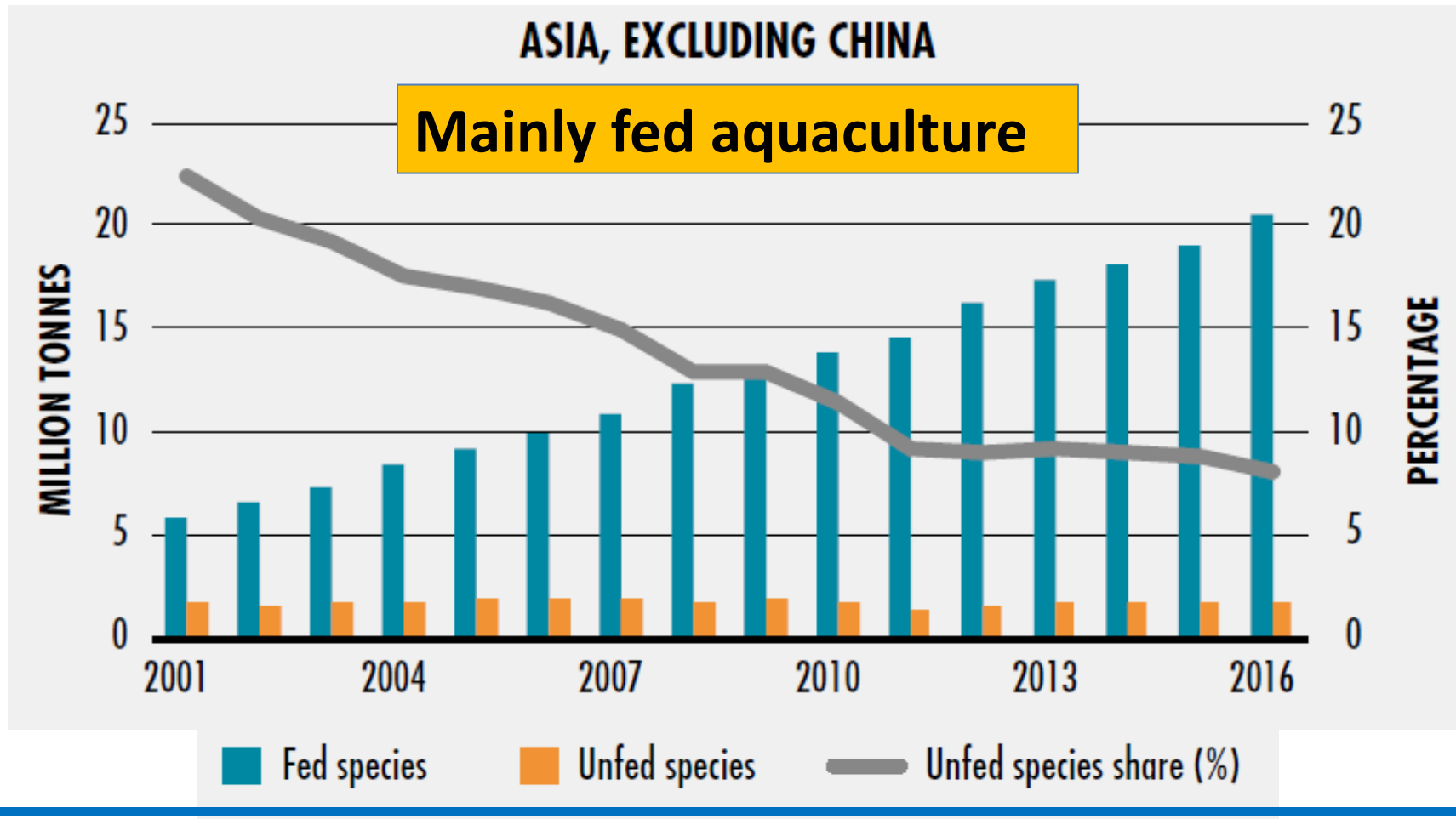
Category	Africa	Americas	Asia	Europe	Oceania	World
Inland aquaculture						
Finfish	1 954	1 072	43 983	502	5	47 516
Crustacea	0	68	2 965	0	0	3 033
Molluscs			286	Mainly Asia		286
Other aquatic animals		1	531			531
Subtotal	1 954	1 140	47 765	502	5	51 367
All aquaculture						
Finfish	1 972	1 978	47 722	2 332	87	54 091
Crustacea	5	795	7 055	0	7	7 862
Molluscs	6	574	15 835	613	112	17 139
Other aquatic animals	0	1	933	0	5	939
Total	1 982	3 348	71 546	2 945	210	80 031

Mainly freshwater

# Fed and non-fed finfish aquaculture production, 2001–2016

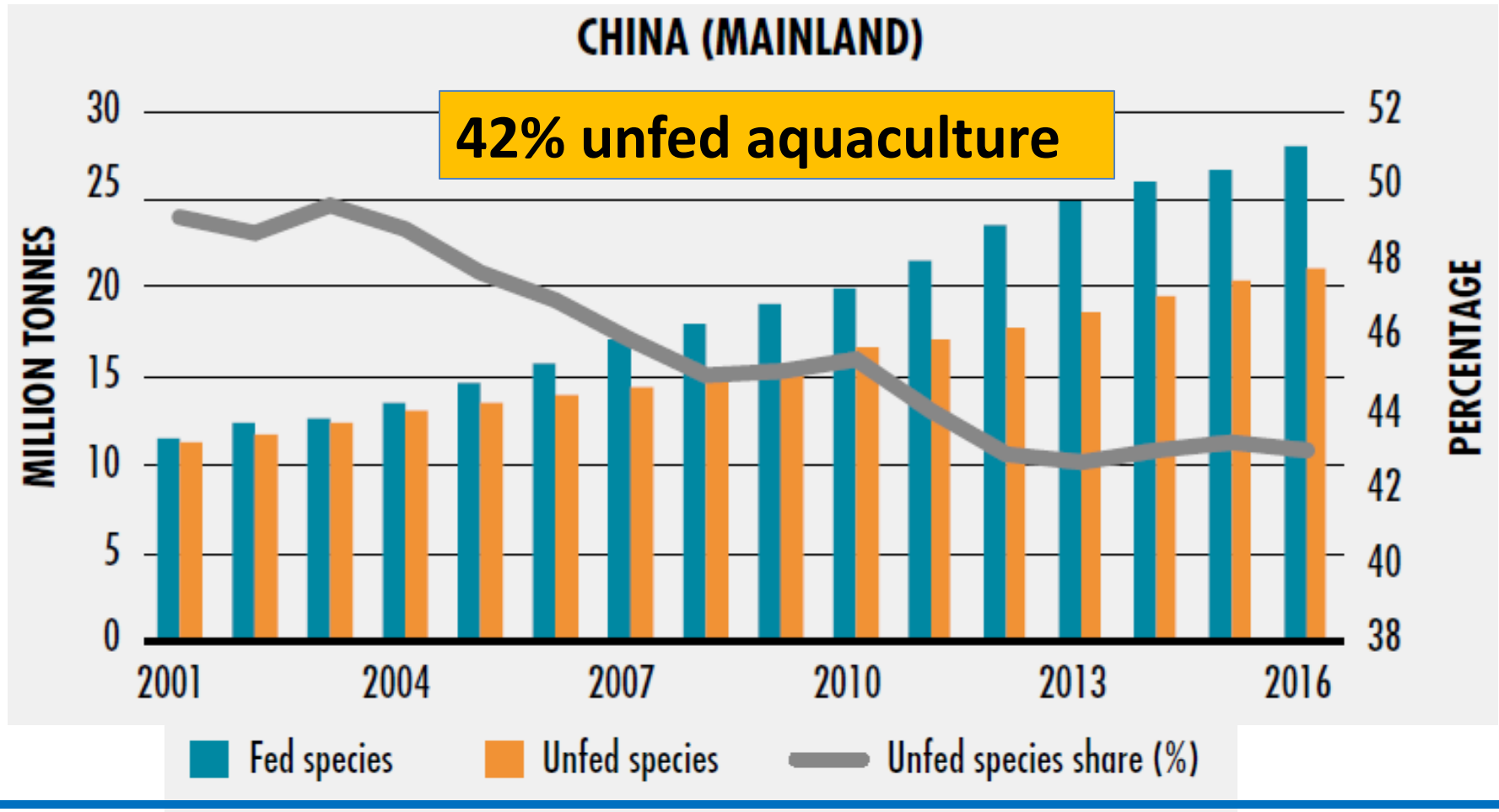


# Fed and non-fed finfish aquaculture production, 2001–2016





# Fed and non-fed finfish aquaculture production, 2001–2016



**Aquaculture can be very sustainable**

**Fish can eat natural food**

**Water can serve many uses**

**Integration with other sectors**





**... But**

**Intensification = need of feeds**

**Intensification = pollution**

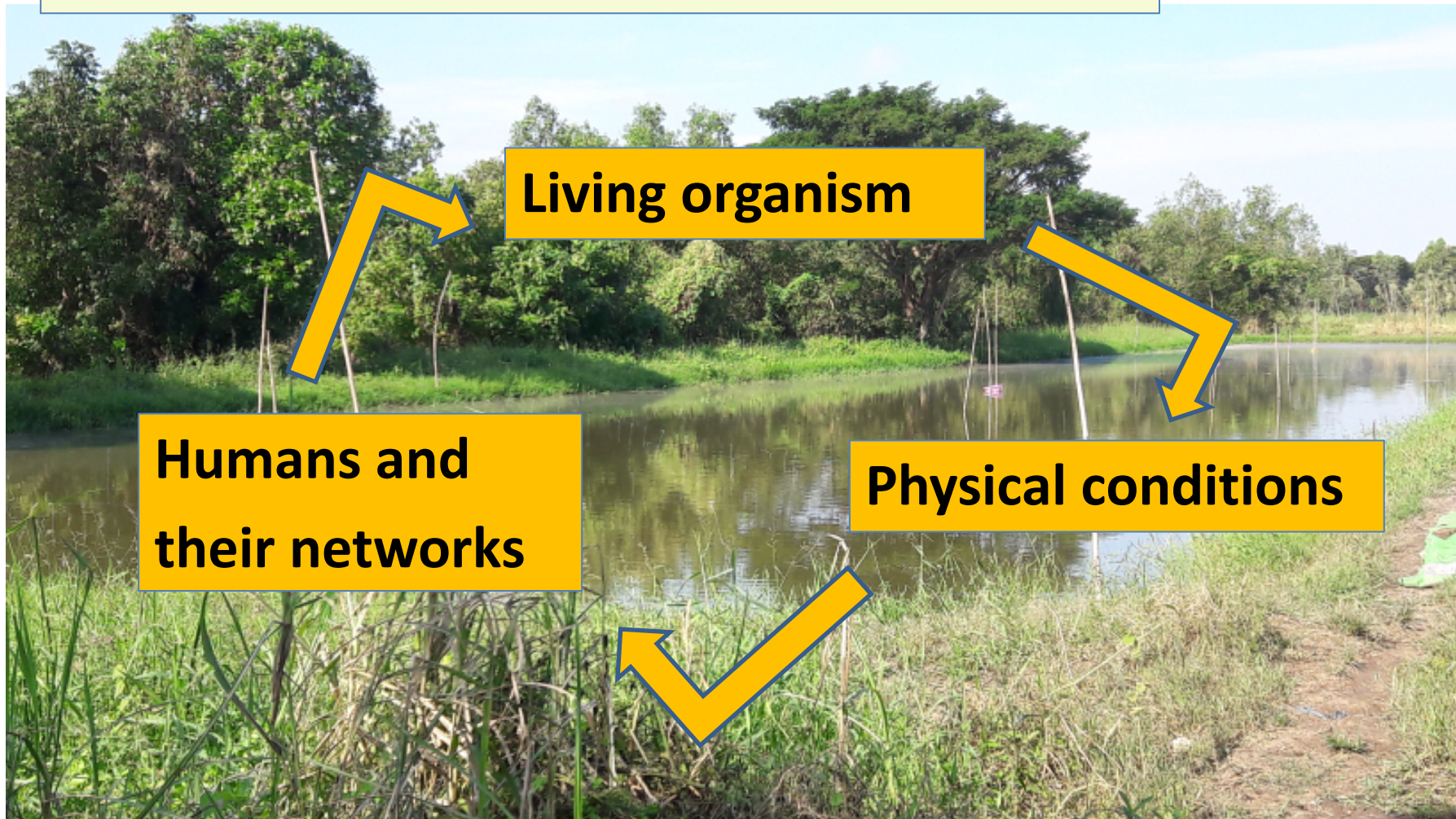
**Water for other uses can be limited**

**conflicts with other sectors are possible**





# Aquaculture is an ecosystem

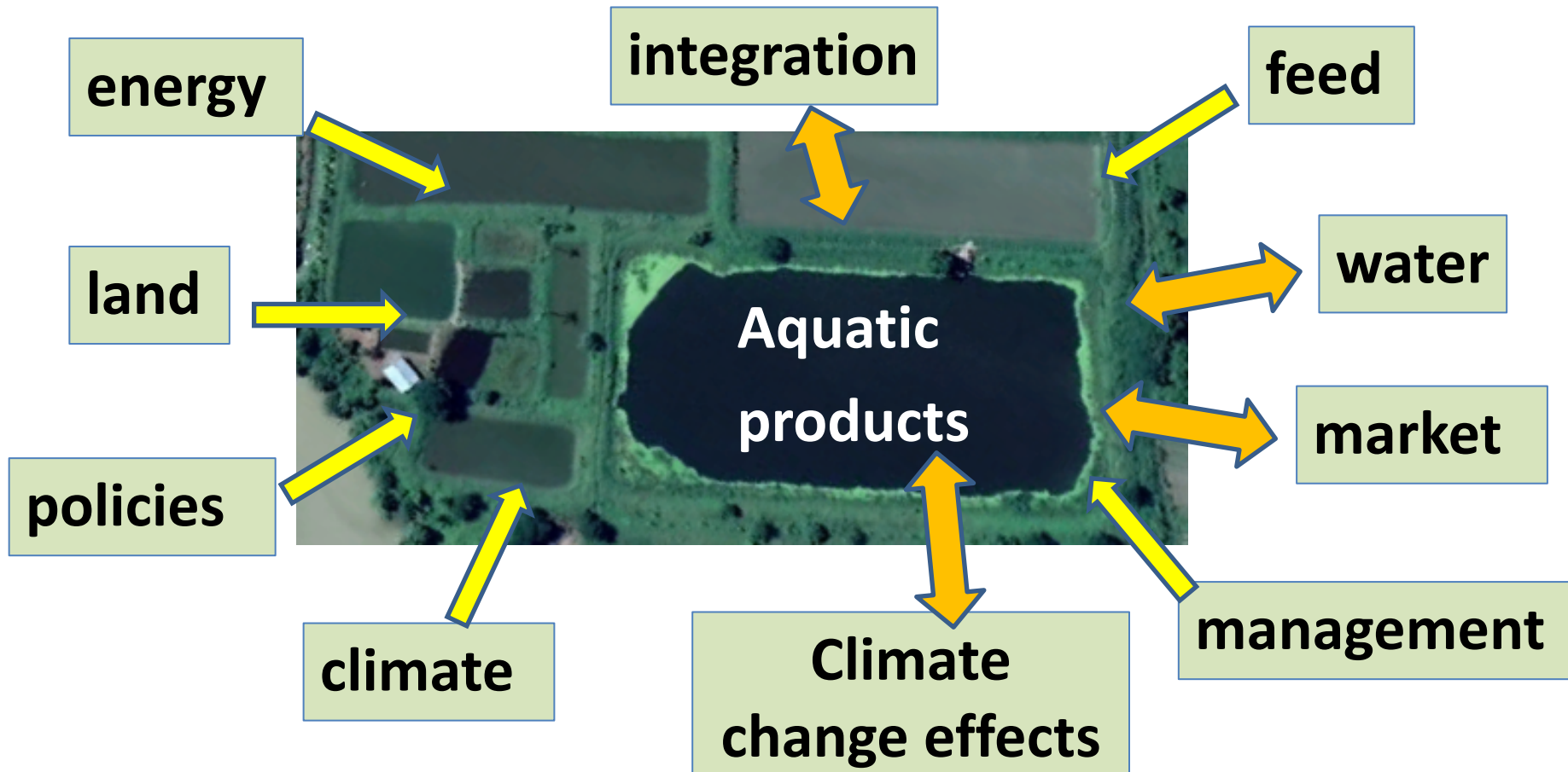




**An aquatic ecosystem can vary: farm level, watershed level, global level**



# Different sizes, different ecosystems → Different balances



# For sustainable development we need to consider...



**Ecological needs**



**Aquatic products**



**Human needs**



**Economic needs**

**Good governance**





# There is the need to produce sustainably





**With no wastes**



# Support for an ecosystem approach to aquaculture has been in place





# Through global declarations, policy instruments and organizations.

CODE OF CONDUCT  
FOR  
RESPONSIBLE FISHERIES

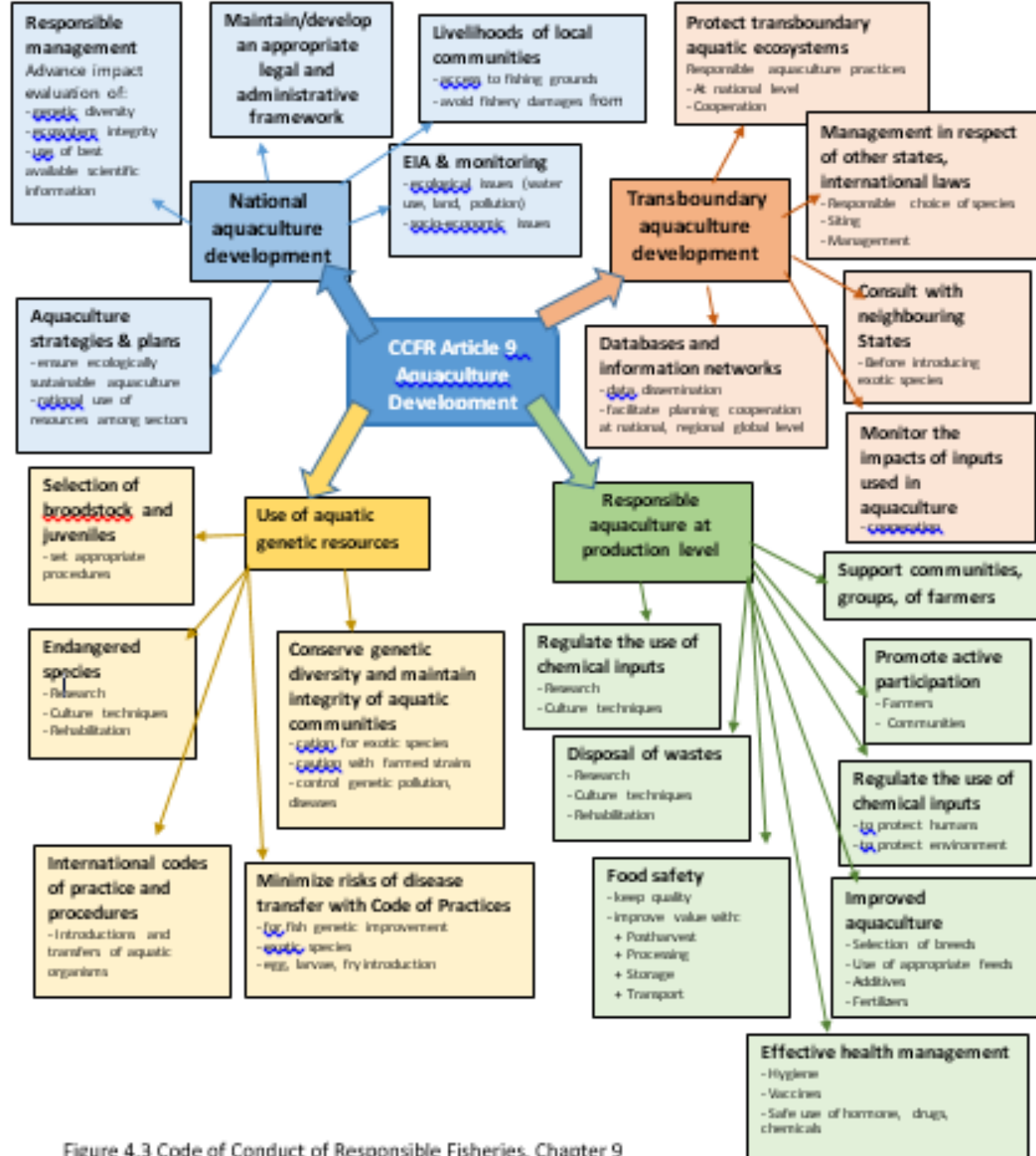


Convention on  
Biological Diversity



# Chapter 9-10

## Code of Conduct of Responsible Fisheries



Ecosystems

Figure 4.3 Code of Conduct of Responsible Fisheries, Chapter 9

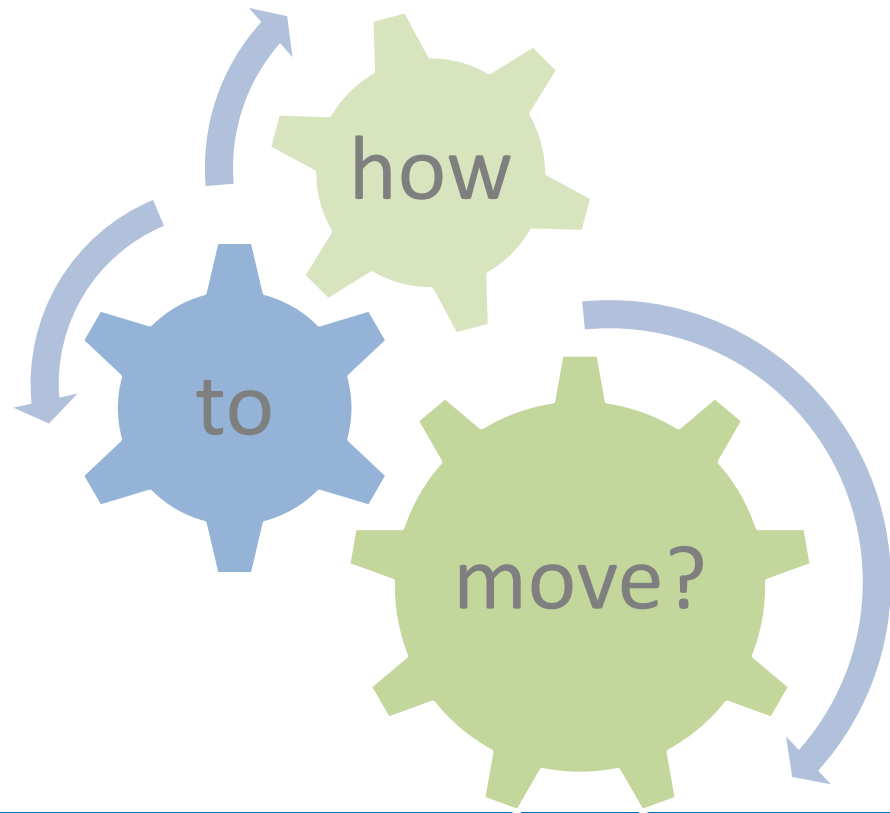


Also supported at national  
or regional level





However, progress in developing ecosystem-based management plans has been slow



**System  
complexity**

**Potential  
conflicts**

**Lack experience in how  
to implement this  
integrated and holistic  
approach**

**Many  
strategies**



A training course  
has been designed  
to address these  
capacity needs

# Ecosystem Approach to Aquaculture Management

## HANDBOOK



Ecosystems Approach To A



Food and Agriculture  
Organization of the  
United Nations



# The course comes from the experience of similar training on fishery, the Ecosystem Approach to Fishery Management (EAFM) Organized by many partners



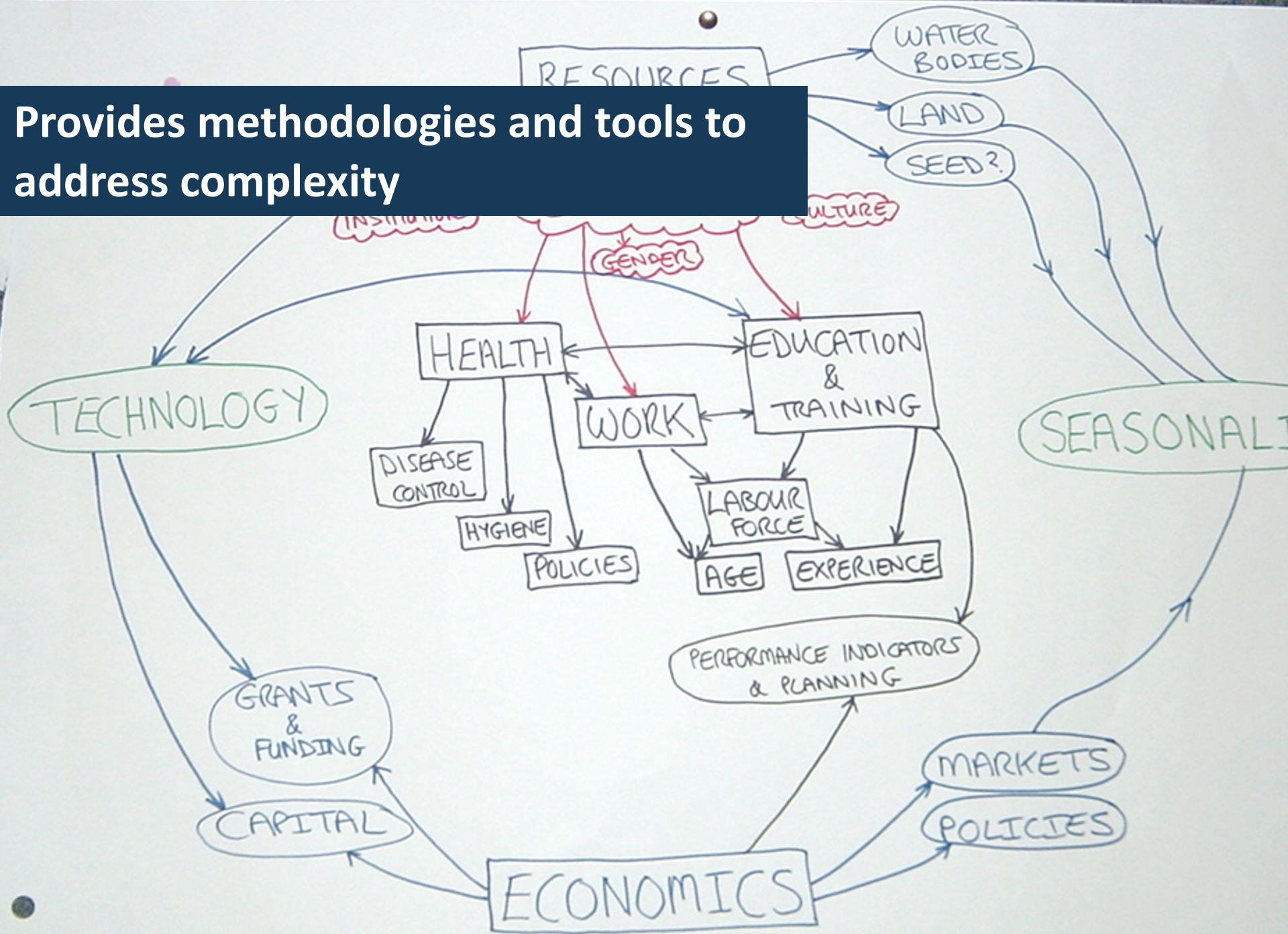
**The course focuses on building bottom-up analytical, interpersonal and professional planning skills**



Ecosystems Approach To Aquaculture Management (EAAM) Training



Provides methodologies and tools to address complexity





These skills will help lead to develop participation in people who are directly or indirectly involved with aquaculture





**And to find a balance between ecological needs, human needs and good governance**





**Essential EAAM training is highly interactive**



**And fully engages all participants**



# The course targets mid-level managers, future managers and staff working with



Ecosystems Approach To Aquaculture Management (EAAM) Training



**Aquaculture**

**Environment**

**Agriculture**

**Economic  
development**

**Planning departments**







Trainees will understand how to move in and handle complex situations





# Ecosystem Approach to Aquaculture Management

HANDBOOK



# Ecosystem Approach Aquaculture Management

WORKBOOK



# Ecosystem Approach to Aquaculture Management

TOOLBOX



## *Essential EAAM*

Developing capacity in the ecosystems approach to  
aquaculture management (EAAM)



norgesvel.com

**A complete set of Essential EAAM course materials has been developed and is available for free**

# *Essential* EAAM

To download all materials please see

